

DI LIU

Wyss Institute for Biologically Inspired Engineering and
Department of Systems Biology, Harvard Medical School

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EDUCATION AND Academic EXPERIENCE

- **Wyss Institute for Biologically Inspired Engineering and
Department of Systems Biology, Harvard Medical School** 12/2016-present
Postdoctoral scholar
Advisor: Prof. Peng Yin
- **Dept. of Chemistry, University of Chicago** 9/2011-12/2016
Ph.D. in Chemistry (2016); M.S. Degree in Chemistry (2012); GPA: 4.0/4.0
Thesis: Synthetic Nucleic Acid Topology
Advisor: Dr. Yossi Weizmann
- **Sch. of Chemistry and Chemical Engineering, Nanjing University** 9/2007-6/2011
B.S. Degree in Chemistry (2011)
Ranking: 1/136; Overall GPA: 94/100; Major GPA: 96/100
Research in the Design and Synthesis of Photoactivable Platinum-based Anticancer Drugs;
Advisor: Prof. Zijian Guo

PUBLICATIONS

8. G. Chen, **D. Liu**, H. C. Rees, Y. Weizmann, "Site-Specific Functionalization of Nanoparticles for Programmable Self-Assembly", *under revision*, (2016).
7. **D. Liu**, Y. Shao, G. Chen, Y. Tse-Dinh, J. A. Piccirilli, Y. Weizmann, "Synthesizing topological structures containing RNA", *under revision*, (2016).
6. **D. Liu**, G. Chen, U. Akhter, T. M. Cronin, Y. Weizmann, "Creating Complex Molecular Topologies by Configuring DNA Four-way Junctions", *Nature Chem.*, 2016, 8(10): 907-914. (Cover Story)
5. D. Wen, Y. Peng, **D. Liu**, Y. Weizmann and Ram I. Mahato. "Mesenchymal Stem Cell and Derived Exosome as Small RNA Carrier and Immunomodulator to Improve Islet Transplantation", *J. Control Release*, 238, 166-175 (2016).
4. G. Chen‡, **D. Liu‡**, C. He‡, T. R. Gannet, W. Lin, Y. Weizmann, "Enzymatic Synthesis of Periodic DNA Nanoribbons for Intracellular pH Sensing and Gene Silencing", *J. Am. Chem. Soc.*, 137, 3844-3851 (2015). ‡ Co-first authors. (Cover Story and Highlighted in JACS Spotlights)
3. **D. Liu**, J. L. Ma, W. Zhou, W. J. He and Z. J. Guo, "Synthesis and Photoactivity of a Pt(II) Complex Based on an *o*-Nitrobenzyl-derived Ligand", *Inorganica Chimica Acta*, 2012, 393:198-203.
2. **D. Liu**, H. F. Zhang and Y. Lu, "Computer Modeling of Linear Condensation Polymerization", *Chinese Polymer Bulletin (Gaofenzi Tongbao, Chinese)*, 2012,(02):103-107.
1. **D. Liu**, H. F. Zhang and Y. Lu, "Computer Modeling of Probability Effect in the Chemical Reactions of Polymers", *Chinese Polymer Bulletin (Gaofenzi Tongbao, Chinese)*, 2011,(06):94-99.

PRESENTATIONS AND TALKS

8. "Crystallizing Artificially Designed Complex RNA Nanostructures" (Poster), *HHMI Science Meeting*, Janelia Research Campus, Ashburn, VA, Sep. 2016.
7. "Crystallizing Artificially Designed Complex RNA Nanostructures" (Poster), *13th Annual Conference on Foundations of Nanoscience: Self-Assembled Architectures and Devices (FNANO16)*, Snowbird, UT, April 2016.
6. "Synthetic Nucleic Acid Topology" (Oral presentation), *Tiger Talk*, Department of Chemistry, University of Chicago, Dec. 2015.
5. "Synthetic RNA Topology via Programmed Self-assembly" (Oral presentation), *Chicagoland RNA Club*, Chicago, IL, Nov. 2015.
4. "Controlling the Bending and Twist of RNA Assemblies via Artificially Designed Loop-Bulge Kissing Interactions" (Poster), *21st International Conference on DNA Computing and Molecular Programming (DNA21)*, Harvard University, Aug. 2015.
3. "Folding a Single Strand of RNA into Nanocages" (Poster), *Gordon Research Conference on RNA Nanotechnology*, Ventura, CA, Feb. 2015.
2. "Creating Complex Molecular Topologies by Configuring DNA Four-Way Junctions" (Contributed talk), *20th*

International Conference on DNA Computing and Molecular Programming (DNA20), Kyoto University, Japan, Sep. 2014.

1. "Creating Complex Molecular Topologies by Configuring DNA Four-Way Junctions" (Poster), *AAAS 2014 Annual Meeting*, Chicago, IL, Feb. 2014.

AWARDS AND HONORS

(During Graduate Study)

- ISNSCE Best Student Presentation Award (DNA20) 2014
- HHMI International Predoctoral Fellowship 2014-2016
- Everett E. Gilbert Memorial Prize for the Best Third Year Experimentalist in Organic Chemistry 2014
- AAAS 2014 Student Poster Competition, Honorable Mention in Physical Sciences Category 2014
- Martha Ann and Joseph A. Chenicek Graduate Research Fellowship 2013
- Gerhard Closs Teaching Award in Organic Chemistry 2012

(During Undergraduate Study)

- National Scholarship (Ministry of Education of the P.R. China) 2008,2010
- 1st Province-wide Undergraduate Chemistry Experiment Competition (Jiangsu Chemistry Society), awarded with First Prize 2010
- National Undergraduate Innovation Program, awarded with Excellent Work Prize 2010
- JIANG Wenruo Scholarship 2009

(During High-school Study)

- National Chemistry Olympiad Competition for High School Students, awarded with First Prize (Recommended for Admission to NJU) 2006